WHAT IS CLAIMED IS:

1. A method of setting a transport format combination (TFC) in a broadband code division multiple access (CDMA) communication system, the method comprising:

5   a) transmitting from a radio resource control (RRC) layer transport format set (TFS) information and transport format combination set (TFCS) information during a channel initialization for data transmission among respective layers of the broadband CDMA communication system;

b) selecting at a medium access control (MAC) layer an initial TFC by preferentially

10 allocating a maximum packet data unit (PDU) value to a transmission channel on which a logic channel having a relatively high priority among a plurality of transmission channels has been mapped, said allocating achieved by analyzing the received TFS information and the TFCS information;

c) transmitting from the MAC layer to a radio link control (RLC) layer the initial PDU

15 value including respective logic channels by allocating an initial PDU value according to the initial TFC to the respective logic channels; and

d) receiving at the RLC layer the initial PDU value, and setting the initial PDU value as a final PDU value.

20   2. The method as claimed in claim 1, wherein the selecting step
comprises:

determining at the MAC layer a mapping status of the logic channels for the respective transmission channels, and determining a priority of the respective logic channels;

selecting among the TFCS the TFC that allocates the maximum PDU value to the

25 transmission channel on which the logic channel having the highest priority is mapped;

re-selecting among selected TFCs the TFC that allocates the maximum PDU value to the transmission channel on which the logic channel having the next-to-highest priority is mapped if a plurality of TFCs are selected; and

repeating the third substep until one of the TFCs is selected, and if one of the TFCs is

30 selected, setting the TFC as the initial TFC.

3. The method as claimed in claim 1, wherein step c) comprises:

allocating at the MAC layer the initial PDU value according to the initial TFC to the corresponding transmission channel;

allocating the allocated initial PDU value to the logic channel having the highest priority among the logic channels mapped on the respective transmission channel; and

transmitting the initial PDU value allocated to the logic channel to the RLC layer including the logic channel.

4. The method as claimed in claim 1, wherein step d) further comprises the steps of:

comparing at the RLC layer the received initial PDU value and a maximum transmission amount of a transmission buffer provided in the RLC layer, and if the initial PDU value is larger than the maximum transmission amount, the RLC layer sets the maximum transmission value as the final PDU value, while if the initial PDU value is smaller than the maximum transmission amount, it sets the initial PDU value as the final PDU value.

5. The method as claimed in claim 1, wherein step d) further comprises the steps of:

receiving at the RLC layer the initial PDU value transmitted to the MAC layer where the initial transmission data is generated along with buffer occupancy information of a transmission buffer by dividing or combining the initial transmission data according to the set final PDU value during the generation of the initial transmission data; and

setting the received initial PDU value as the final PDU value.

6. A method of setting a transport format combination (TFC) in a broadband code division multiple access (CDMA) communication system, the method comprising the steps of:

transmitting from a radio resource control (RRC) layer transport format set (TFS) information and transport format combination set (TFCS) information during a channel initialization for data transmission among respective layers of the broadband CDMA communication system; and

selecting at a medium access control (MAC) layer an initial TFC using the received TFS information and the TFCS information, allocating the initial PDU value according to the initial TFC to the logic channels mapped on the corresponding transmission channel, and transmitting

the initial PDU value to a radio link control (RLC) layer including the respective logic channels.

7. A method of setting a transport format combination (TFC) in a broadband code division multiple access (CDMA) communication system, the method comprising:

5   receiving at a medium access control (MAC) layer transport format set (TFS) information and transport format combination set (TFCS) information from a radio resource control (RRC) layer during a channel initialization for data transmission among respective layers of the broadband CDMA communication system; and

selecting an initial TFC by analyzing the received TFS information and the TFCS 10 information, and preferentially allocating a maximum packet data unit (PDU) value to a transmission channel on which a logic channel having a relatively high priority among a plurality of transmission channels has been mapped, allocating the initial PDU value according to the initial TFC to the logic channels mapped on the corresponding transmission channel, and transmitting the initial PDU value to a radio link control (RLC) layer including the respective 15 logic channels.